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| 09/941,819   | 08/29/2001     | David R. Larson         | 10019074-1 7583         |                 |  |
| 7590 08/13/2004                                      |                |                         | EXAMINER                |                 |  |
|  | ACKARD COMPANY | ROSARIO-VASQUEZ, DENNIS |                         |                 |  |
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|  |                |                         | DATE MAILED: 08/13/2004 |                 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|--|---|---|---|--|-----------------------|--|--|
|  |   | Applicatio  | Application No.   |  | Applicant(s)          |  |  |
|  |   | 09/941,819  | •   | LARSON, DAVID R.   |                       |  |  |
|  | Office Action Summary   | Examiner  |   | Art Unit   |                       |  |  |
|  | ·<br>   | i   | sario-Vasquez   | 2621   |                       |  |  |
| Period fo  | The MAILING DATE of this communication Reply  | on appears on the   | cover sheet with the c  | correspondence ac  | idress                |  |  |
| THE  <br>- External after<br>- If the<br>- If NC<br>- Failu<br>Any | ORTENED STATUTORY PERIOD FOR I MAILING DATE OF THIS COMMUNICAT asions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communical period for reply specified above is less than thirty (30) day to period for reply is specified above, the maximum statutory are to reply within the set or extended period for reply will, by reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b). | FION.  CFR 1.136(a). In no evertion.  s, a reply within the statury period will apply and will y statute. cause the applications. | nt, however, may a reply be tin<br>tory minimum of thirty (30) day<br>expire SIX (6) MONTHS from<br>cation to become ABANDONE | nely filed  s will be considered time the mailing date of this of D (35 U.S.C. § 133). | ly.<br>xommunication. |  |  |
| Status   |   |   |   |  |                       |  |  |
| 1)  🏹  | Responsive to communication(s) filed or   | n 29 August 2001.   |   |  |                       |  |  |
|  |   |   |   |  |                       |  |  |
| 3)   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |   |   |  |                       |  |  |
| Disnosit   | ion of Claims   | ., <b></b>  | .,,   |  |                       |  |  |
| 4)⊠<br>5)□<br>6)⊠<br>7)□<br>8)□                                    | Claim(s) <u>1-20</u> is/are pending in the appli<br>4a) Of the above claim(s) is/are w<br>Claim(s) is/are allowed.<br>Claim(s) <u>1-20</u> is/are rejected.<br>Claim(s) is/are objected to.<br>Claim(s) are subject to restriction  | ithdrawn from cor   |   |  |                       |  |  |
|  | ion Papers  |   |   |  |                       |  |  |
| 10)⊠   | The specification is objected to by the Ex<br>The drawing(s) filed on <u>08/29/2001</u> is/are<br>Applicant may not request that any objection<br>Replacement drawing sheet(s) including the<br>The oath or declaration is objected to by   | e: a) accepted of to the drawing(s) be correction is require  | e held in abeyance. Se<br>ed if the drawing(s) is ob  | e 37 CFR 1.85(a).<br>ojected to. See 37 C  |                       |  |  |
| Priority :   | under 35 U.S.C. § 119   |   |   |  |                       |  |  |
| a)   | Acknowledgment is made of a claim for f  All b) Some * c) None of:  1. Certified copies of the priority doc  2. Certified copies of the priority doc  3. Copies of the certified copies of the application from the International  See the attached detailed Office action for  | uments have beer<br>uments have beer<br>ne priority docume<br>Bureau (PCT Rule  | n received.<br>n received in Applicat<br>ents have been receive<br>e 17.2(a)).  | ion No<br>ed in this Nationa   | I Stage               |  |  |
| 2) Notion Notion Notion Notion                                     | nt(s)  ce of References Cited (PTO-892)  ce of Draftsperson's Patent Drawing Review (PTO-9  mation Disclosure Statement(s) (PTO-1449 or PTO  er No(s)/Mail Date   |   | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal 6 6) Other:   | ate  | <sup>-</sup> O-152)   |  |  |

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1,2,3,4,6,7,8,9,13,14,15,16,17,18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin et al. (US Patent 6,211,868 B1).

Regarding claim 1, Lin et al. discloses a document processing system for modifying image data, the image data including a foreground component and a background component, said document processing system comprising:

an image enhancement system configured to receive image data (In the Lin reference, a multimedia system corresponds with the claimed image enhancement system that is configured to receive icon and color data in step 106 of a program shown fig. 1 in col., lines 50,51.), receive information corresponding to a request for modification of the image data (Fig. 2A,num. 202-204 receives icons and characters upon a request of a user to select either 202-204.), and, in response to the request, modify the image data (The icons and characters are modified using foreground, background and shading setting procedures 225,226,227 of fig. 2C in col. 3, lines 30-34.) by increasing contrast between the foreground component and the background component (Fig. 2C shows the setting procedures that have a associated window 232 of figure 2D in col. 3, lines 43-46 for increasing the contrast using a setting window 239

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that contains up and down arrows for changing the contrast. Note that one of the three setting procedures is selected in col. 3, lines 43-46. Thus, the background setting procedure 225 of fig. 2C is selected to increase the contrast of a background component 223 of fig. 2C using the up and down arrows of the setting window 239 of fig. 2D with respect to the foreground component 222 of fig. 2C.) and altering lightness of both the foreground component and the background component (Brightness 240 of fig. 2D corresponds with the claimed lightness of both the background and foreground components that can be altered when the background and foreground procedures 225,226 are selected using the respective window 232 of fig. 2D for each setting procedure).

Regarding claim 2, Lin et al. discloses the document processing system of claim 1, further comprising:

An actuator ("Next" 231,250 and "Previous" 230,249 blocks of fig. 2C and 2E switch between the display of fig. 2C and 2E.) communicating with said image enhancement system (multimedia system), said actuator ("Next" 231,250 and "Previous" 230,249 blocks of fig. 2C and 2E) having an actuated state (A user selects either the next or previous blocks.) corresponding to the request for modification (Fig. 2A,num. 202-204 receives icons and characters upon a request of either 202-204.) of the image data (icon and color data).

When a user selects the next or previous blocks a corresponding display (fig. 2C or 2E) appears that allows a user to modify the image data.

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Regarding claim 3, Lin et al. discloses the document processing system of claim 2, wherein said actuator ("Next" 231,250 and "Previous" 230,249 blocks of fig. 2C and 2E) is implemented via a graphical user interface (as shown in figure 2C and 2E).

Regarding claim 4, Lin et al. discloses the document processing system of claim 3, further comprising:

A document processing device (Step 215 of fig. 2B is a program that processes characters.) communicating with said image enhancement system (multimedia system), said document processing device (Step 215 of a program that processes characters.) being configured to produce a document (Fig. 2B, step 219 displays characters.) with the image data (icon and color data), said document processing device (Step 215 of a program that processes characters.) including said actuator ("Next" 231,250 and "Previous" 230,249 blocks of fig. 2C and 2E).

Fig. 2E is a display of an icon and character program that corresponds with the program of fig. 2B, step 215.

Regarding claim 6, Lin et al. discloses the document processing system of fig. 1, wherein said image enhancement system (multimedia system) is configured to modify the image data incrementally (as shown in fig. 2D, num. 234-240), such that, at a first increment (selection of 226 of fig. 2C.), the image data is modified by increasing contrast (239 of fig. 2D) between the foreground component (fig. 2C, num. 222) and the background component (fig. 2C, num. 223).

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Regarding claim 7, Lin et al. discloses the document processing system of claim 6, at said first increment (selection of 226 of fig. 2C), lightness (Brightness of fig. 2D, num. 240) of only the foreground component (222 of fig. 2C) is increased (using the "up arrow" of 240) or decreased (using the "down arrow" of 240).

Claim 8 has been addressed in claim 7.

Regarding claim 9, Lin et al. discloses the document processing system of claim 6, wherein, at said first increment (selection of 226 of fig. 2C), lightness of only of the foreground component (222 of fig. 2C) is altered (This portion of the limitation was addressed in claim 7.), and at a second increment (Loop back to fig. 2C to select the other selection of 225 of fig. 2C upon the selection of 251 of fig. 2D and mentioned in col. 3, lines 52,53.), the image data (icon and color data) is modified by altering lightness (Brightness of fig. 2D, num. 240) of the other background component (fig. 2C,num. 223) such that overall lightness of the image data is altered (A brightness change of both the foreground and background components results in a overall change of brightness).

Claim 13 has been addressed in claim 1.

Claim 14 has been addressed in claims 2 and 3.

Claim 15 has been addressed in claim 12.

Claim 16 has been addressed in claim 6.

Claim 17 has been addressed in claim 7.

Claim 18 has been addressed in claim 8.

Claim 19 has been addressed in claim 9.

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## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US Patent 6,211,868 B1) in view of

Regarding claim 5, Lin et al teaches the document processing system of claim 4, wherein said document processing device is a computer program and does not teach the limitation of claim 5. However, Lin et al. does suggest using a computer program for modifying characters and fonts.

Kim et al., in the field of endeavor of color printing, does teach a document processing device is a printer that uses a program with fonts (Kim et al. col. 11, lines 58-64) as suggested by Lin et al.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Lin et al. 's teaching of a document processing device of a computer program with Kim et al.'s teaching of a printer with a program because, Kim et al.'s printer "generates full color images with appropriate fonts and text" as mentioned in col. 11, lines 58,59.

5. Claims 10,11,12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US Patent 6,211,868 B1) in view of Schreiber (US Patent 4,500,919 A).

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Regarding claim 10, Lin et al. teaches that the document processing system of claim 1, wherein said image enhancement system (multimedia system) is configured to separate the image data into a foreground and background component and does not suggest separating image data into a color component and a lightness component and modify only the lightness component of the image data.

However, Schreiber does teach an image enhancement system (fig. 3) is configured to separate image data (RGB input data of fig. 3) into a color component (saturation component) and a lightness component ("L" or luminance outputted from 24 of fig. 3.) and modify only the lightness component (35 of fig. 3 has a separate process to modify shadows as mentioned in col. 8, lines 38-41.) of the image data (RGB input data of fig. 3).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Lin et al's teaching of separating an image into a background and foreground with Schreiber's teaching of separation of color components, because Schreiber's teaching provides for individual correction for shadow effects and allows a user to achieve an overall desired color change as mentioned in col. 8, lines 40-42,53-57.

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Regarding claim 11, Schreiber teaches the document processing system of claim 10, wherein said image enhancement system (fig. 3) is configured to receive the image data in RGB format (RGB input data of fig. 3), convert the image data to Lightness Hue Chroma format (Lightness Hue Saturation format mentioned in col. 1, line 2. Note that saturation in an aspect of color as mentioned in col. 2, line 3.), and convert the image data to RGB format (The output of fig. 3 is converted to RGB format.) after modification (35 of fig. 3 has a separate process to modify shadows as mentioned in col. 8, lines 38-41.).

Regarding claim 12, Lin et al. discloses the document processing system of claim 10, further comprising:

means (fig. 8, num. 804 is a work area as mentioned in col. 7, lines 5-8.) for producing a document (The work area is of a word processor as mentioned in col. 7, lines 5-8.) with the image data (icon and color data).

The document 804 of fig. 8 with image data as icons next to each word in 804 are integrated.

Claim 20 has been addressed in claim 10.

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shin et al. (US Patent 5,524,070 A) is pertinent as teaching a method of adjusting contrast with respect to a background and foreground component as mentioned in col. 2, lines 10,11.

Bollman et al. (US Patent 5,289,297 A) is pertinent as teaching a method of selecting a background 220 or foreground 230 component and modifying 290 the foreground component as shown in fig. 4A.

Parker et al. (US Patent 4,651,064 A) is pertinent as teaching a method of independently controlling the intensity of a background and foreground component as mentioned in col. 1, lines 41-45.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Rosario-Vasquez whose telephone number is 703-305-5431. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau can be reached on 703-305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dennis Rosario-Vasquez Unit 2621

LEO BOUDREAU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600